DESCRIPTION

The Journal of Affective Disorders publishes papers concerned with affective disorders in the widest sense: depression, mania, mood spectrum, emotions and personality, anxiety and stress. It is interdisciplinary and aims to bring together different approaches for a diverse readership. Top quality papers will be accepted dealing with any aspect of affective disorders, including neuroimaging, cognitive neurosciences, genetics, molecular biology, experimental and clinical neurosciences, pharmacology, neuroimmunoendocrinology, intervention and treatment trials.

AUDIENCE

Journal of Affective Disorders is interdisciplinary and aims to bring together different approaches and fields including biochemistry, pharmacology, endocrinology, genetics, statistics, epidemiology, psychodynamics, classification, clinical studies and studies of all types of treatment for a diverse readership.

IMPACT FACTOR

2018: 4.084 © Clarivate Analytics Journal Citation Reports 2019

ABSTRACTING AND INDEXING

SIIC Data Bases
BIOSIS Citation Index
Current Contents - Life Sciences
Embase
Informedicus
PsycINFO
Pascal Francis
PubMed/Medline
Scopus
EDITORIAL BOARD

Editors-in-Chief
P. Brambilla, Dept. of Pathophysiology and Transplantation, University of Milan, via Sforza 35, 20122, Milano, Italy
J.C. Soares, Dept. of Psychiatry & Behavioral Sciences, University of Texas at Houston Health Sciences Center, 1941 East Rd, Houston, TX 77054, Texas, USA

Emeritus Editors
Hagop Akiskal, California, USA
Cornelius Katona, England, UK

Consulting Editors for Statistics:
C. Fagnani, Rome, Italy
L. Finos, Padova, Italy
C. Green, Houston, Texas, USA
M. Isola, Udine, Italy
G. Perez Algorta, Lancaster, England, UK
R. Suchting, Houston, Texas, USA

Editorial Board
B. Amann, Barcelona, Spain
C. Arango, Madrid, Spain
C. Bearden, Los Angeles, California, USA
M. Bellani, Verona, Italy
F. Bellivier, Paris, France
R.H. Belmaker, Beer Sheva, Israel
V. Bergink, Rotterdam, Netherlands
M. Berk, Geelong, Victoria, Australia
B. Bermaher, Pittsburgh, Pennsylvania, USA
P. Blier, Ottawa, Ontario, Canada
H.P. Blumberg, New Haven, Connecticut, USA
S. Borgwardt, Basel, Switzerland
R. O. Brady Jr., Boston, Massachusetts, USA
D. Brent, Pittsburgh, Pennsylvania, USA
M. Brotman, Bethesda, Maryland, USA
R. Brunner, Heidelberg, Germany
K. Burdick, New York, New York, USA
L. Cohen, Boston, Massachusetts, USA
D. Cousins, Newcastle upon Tyne, England, UK
B. Crespo-Facorro, Santander, Spain
A. Danese, London, England, UK
R. Dantzer, Houston, Texas, USA
P. Dazzan, London, England, UK
G. Del Vecchio, Bosisio Parini, Italy
M. DelBello, Cincinnati, Ohio, USA
J.R. DePaulo, Baltimore, Maryland, USA
V.A. Diwadkar, Detroit, Michigan, USA
D. Dougherty, Charlestown, Massachusetts, USA
U. Ettinger, Bonn, Germany
A. Fagiolini, Siena, Italy
P. Falkai, Munich, Germany
M. Fava, Boston, Massachusetts, USA
J.G. Fiedorowicz, Iowa City, Iowa, USA
S. Frangou, New York, New York, USA
M.A. Frye, Rochester, Minnesota, USA
C. Gaser, Jena, Germany
J. Geddes, Oxford, UK
D. Glahn, Hartford, Connecticut, USA
B.I. Goldstein, Toronto, Ontario, Canada
X. Gonda, Budapest, Hungary
J. Houenou, Créteil, France
D. Iosifescu, New York, USA
J. Jokinen, Umeå, Sweden
S. Kasper, Vienna, Austria
T. Kato, Saitama, Japan
S. Kennedy, Toronto, Ontario, Canada
R.C. Kessler, Boston, Massachusetts, USA
N. Koutsouleris, Munich, Germany
A.D. Krystal, Durham, North Carolina, USA
A.K. Kumar, Chicago, Illinois, USA
B. Lafer, São Paulo, Brazil
E. Leibenluft, Bethesda, Maryland, USA
E. Lenz, St. Louis, Missouri, USA
R. Machado-Vieira, Houston, Texas, USA
M. Maj, Naples, Italy
G. Malhi, Sydney, New South Wales, Australia
S.J. Mathew, Houston, Texas, USA
K. Matsuo, Saitama, Japan
C. McDonald, Galway, Ireland
A. M. McIntosh, Edinburgh, Scotland, UK
T.D. Meyer, Houston, Texas, USA
A. Meyer-Lindenberg, Mannheim, Germany
D. Miklowitz, Los Angeles, California, USA
P. Mitchell, Sydney, New South Wales, Australia
I. Nenadić, Marburg, Germany
A. Nierenberg, Charlestown, Massachusetts, USA
M. Nobile, Bosisio Parini, Italy
M. Nothen, Bonn, Germany
W.A. Nolen, Groningen, Netherlands
R. Perlis, Boston, Massachusetts, USA
G. Perugi, Pisa, Italy
K.L. Phan, Chicago, Illinois, USA
M. Phillips, Pittsburgh, Pennsylvania, USA
A. Picardi, Rome, Italy
D.S. Pine, Bethesda, Maryland, USA
M. Pollack, Chicago, Illinois, USA
J. Quevedo, Houston, Texas, USA
N. Rasgon, Palo Alto, California, USA
Z. Rihmer, Budapest, Hungary
H. G. Ruhé, Nijmegen, Netherlands
S. Ruhrmann, Köln, Germany
N.D. Ryan, Pittsburgh, Pennsylvania, USA
J.K. Rybakowski, Poznań, Poland
A. Saffet Gonul, Izmir, Turkey
G. Sanacora, New Haven, Connecticut, USA
S. Selvaraj, Houston, Texas, USA
E. Sherwood Brown, Dallas, Texas, USA
T. Si, Beijing, China
H. B. Simpson, New York, New York, USA
J. Stanley, Detroit, Michigan, USA
D. J. Stein, Cape Town, South Africa
M.B. Stein, La Jolla, California, USA
S.M. Strakowski, Austin, Texas, USA
T. Suppes, Palo Alto, California, USA
A.L. Teixeira, Belo Horizonte - MG, Brazil
M. Tohen, Albuquerque, New Mexico, USA
M. H. Trivedi, Dallas, Texas, USA
F. Verhulst, Rotterdam, Netherlands
E. Vieta, Barcelona, Spain
C. Walss-Bass, Houston, Texas, USA
M. Wessa, Mainz, Germany
S. Zarate, Bethesda, Maryland, USA
X.Y. Zhang, Houston, Texas, USA
GUIDE FOR AUTHORS

Description
The Journal of Affective Disorders publishes papers concerned with affective disorders in the widest sense: depression, mania, anxiety and panic. It is interdisciplinary and aims to bring together different approaches for a diverse readership. High quality papers will be accepted dealing with any aspect of affective disorders, including biochemistry, pharmacology, endocrinology, genetics, statistics, epidemiology, psychodynamics, classification, clinical studies and studies of all types of treatment.

Submission checklist
You can use this list to carry out a final check of your submission before you send it to the journal for review. Please check the relevant section in this Guide for Authors for more details.

Ensure that the following items are present:

One author has been designated as the corresponding author with contact details:
• E-mail address
• Full postal address

All necessary files have been uploaded:

Manuscript:
• Include keywords
• All figures (include relevant captions)
• All tables (including titles, description, footnotes)
• Ensure all figure and table citations in the text match the files provided
• Indicate clearly if color should be used for any figures in print

Author Statement
Contributors, Role of the Funding Source and Acknowledgements are mandatory and must be retained in the Author Statement (submission file type) under their respective headings.

Graphical Abstracts / Highlights files (where applicable)

Supplemental files (where applicable)

Further considerations
• Manuscript has been 'spell checked' and 'grammar checked'
• All references mentioned in the Reference List are cited in the text, and vice versa
• Permission has been obtained for use of copyrighted material from other sources (including the Internet)
• A competing interests statement is provided, even if the authors have no competing interests to declare
• Journal policies detailed in this guide have been reviewed
• Referee suggestions and contact details provided, based on journal requirements

For further information, visit our Support Center.

BEFORE YOU BEGIN

Ethics in publishing
Please see our information pages on Ethics in publishing and Ethical guidelines for journal publication.

Ethical Considerations
Authors of reports on human studies, especially those involving placebo, symptom provocation, drug discontinuation, or patients with disorders that may impair decision-making capability, should consider the ethical issues related to the work presented and include (in the Methods and Materials section of their manuscript) detailed information on the informed consent process, including the method or methods used to assess the subject’s capacity to give informed consent, and safeguards included in the study design for protection of human subjects. Specifically, authors should consider all ethical issues relevant to their research, and briefly address each of these in their reports. When relevant patient follow-up data are available, this should also be reported. Specifically, investigators reporting on research involving human subjects or animals must have prior approval from an institutional review board. This approval should be mentioned in the methods section of the manuscript. In countries where institutional review boards are not available; the authors must include a statement that research was conducted in accordance with the Helsinki Declaration as revised 1989. All studies
involving animals must state that the authors followed the guidelines for the use and care of laboratory animals of the author's institution or the National Research Council or any national law pertaining to animal research care.

**Declaration of interest**

All authors must disclose any financial and personal relationships with other people or organizations that could inappropriately influence (bias) their work. Examples of potential competing interests include employment, consultancies, stock ownership, honoraria, paid expert testimony, patent applications/registrations, and grants or other funding. Authors must disclose any interests in two places: 1. A summary declaration of interest statement in the title page file (if double-blind) or the manuscript file (if single-blind). If there are no interests to declare then please state this: 'Declarations of interest: none'. This summary statement will be ultimately published if the article is accepted. 2. Detailed disclosures as part of a separate Declaration of Interest form, which forms part of the journal's official records. It is important for potential interests to be declared in both places and that the information matches. More information.

**Submission declaration**

Submission of an article implies that the work described has not been published previously (except in the form of an abstract, a published lecture or academic thesis, see 'Multiple, redundant or concurrent publication' for more information), that it is not under consideration for publication elsewhere, that its publication is approved by all authors and tacitly or explicitly by the responsible authorities where the work was carried out, and that, if accepted, it will not be published elsewhere in the same form, in English or in any other language, including electronically without the written consent of the copyright-holder.

**Preprints**

Please note that preprints can be shared anywhere at any time, in line with Elsevier's sharing policy. Sharing your preprints e.g. on a preprint server will not count as prior publication (see 'Multiple, redundant or concurrent publication' for more information).

**Use of inclusive language**

Inclusive language acknowledges diversity, conveys respect to all people, is sensitive to differences, and promotes equal opportunities. Articles should make no assumptions about the beliefs or commitments of any reader, should contain nothing which might imply that one individual is superior to another on the grounds of race, sex, culture or any other characteristic, and should use inclusive language throughout. Authors should ensure that writing is free from bias, for instance by using 'he or she', 'his/her' instead of 'he' or 'his', and by making use of job titles that are free of stereotyping (e.g. 'chairperson' instead of 'chairman' and 'flight attendant' instead of 'stewardess').

**Contributors**

Each author is required to declare his or her individual contribution to the article: all authors must have materially participated in the research and/or article preparation, so roles for all authors should be described. The statement that all authors have approved the final article should be true and included in the disclosure.

**Changes to authorship**

Authors are expected to consider carefully the list and order of authors before submitting their manuscript and provide the definitive list of authors at the time of the original submission. Any addition, deletion or rearrangement of author names in the authorship list should be made only before the manuscript has been accepted and only if approved by the journal Editor. To request such a change, the Editor must receive the following from the corresponding author: (a) the reason for the change in author list and (b) written confirmation (e-mail, letter) from all authors that they agree with the addition, removal or rearrangement. In the case of addition or removal of authors, this includes confirmation from the author being added or removed. Only in exceptional circumstances will the Editor consider the addition, deletion or rearrangement of authors after the manuscript has been accepted. While the Editor considers the request, publication of the manuscript will be suspended. If the manuscript has already been published in an online issue, any requests approved by the Editor will result in a corrigendum.
**Article transfer service**
This journal is part of our Article Transfer Service. This means that if the Editor feels your article is more suitable in one of our other participating journals, then you may be asked to consider transferring the article to one of those. If you agree, your article will be transferred automatically on your behalf with no need to reformat. Please note that your article will be reviewed again by the new journal. More information.

**Copyright**
Upon acceptance of an article, authors will be asked to complete a 'Journal Publishing Agreement' (see more information on this). An e-mail will be sent to the corresponding author confirming receipt of the manuscript together with a 'Journal Publishing Agreement' form or a link to the online version of this agreement.

Subscribers may reproduce tables of contents or prepare lists of articles including abstracts for internal circulation within their institutions. Permission of the Publisher is required for resale or distribution outside the institution and for all other derivative works, including compilations and translations. If excerpts from other copyrighted works are included, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by authors in these cases.

For gold open access articles: Upon acceptance of an article, authors will be asked to complete an 'Exclusive License Agreement' (more information). Permitted third party reuse of gold open access articles is determined by the author's choice of user license.

**Author rights**
As an author you (or your employer or institution) have certain rights to reuse your work. More information.

Elsevier supports responsible sharing
Find out how you can share your research published in Elsevier journals.

**Role of the funding source**
You are requested to identify who provided financial support for the conduct of the research and/or preparation of the article and to briefly describe the role of the sponsor(s), if any, in study design; in the collection, analysis and interpretation of data; in the writing of the report; and in the decision to submit the article for publication. If the funding source(s) had no such involvement then this should be stated.

**Funding body agreements and policies**
Elsevier has established a number of agreements with funding bodies which allow authors to comply with their funder's open access policies. Some funding bodies will reimburse the author for the gold open access publication fee. Details of existing agreements are available online. After acceptance, open access papers will be published under a noncommercial license. For authors requiring a commercial CC BY license, you can apply after your manuscript is accepted for publication.

**Open access**
This journal offers authors a choice in publishing their research:

**Subscription**
- Articles are made available to subscribers as well as developing countries and patient groups through our universal access programs.
- No open access publication fee payable by authors.
- The Author is entitled to post the accepted manuscript in their institution's repository and make this public after an embargo period (known as green Open Access). The published journal article cannot be shared publicly, for example on ResearchGate or Academia.edu, to ensure the sustainability of peer-reviewed research in journal publications. The embargo period for this journal can be found below.

**Gold open access**
- Articles are freely available to both subscribers and the wider public with permitted reuse.
- A gold open access publication fee is payable by authors or on their behalf, e.g. by their research funder or institution.

Regardless of how you choose to publish your article, the journal will apply the same peer review criteria and acceptance standards.
For gold open access articles, permitted third party (re)use is defined by the following Creative Commons user licenses:

Creative Commons Attribution-NonCommercial-NoDerivs (CC BY-NC-ND)
For non-commercial purposes, lets others distribute and copy the article, and to include in a collective work (such as an anthology), as long as they credit the author(s) and provided they do not alter or modify the article.

The gold open access publication fee for this journal is **USD 3350**, excluding taxes. Learn more about Elsevier's pricing policy: [https://www.elsevier.com/openaccesspricing](https://www.elsevier.com/openaccesspricing).

**Green open access**
Authors can share their research in a variety of different ways and Elsevier has a number of green open access options available. We recommend authors see our [open access page](https://www.elsevier.com/openaccess) for further information. Authors can also self-archive their manuscripts immediately and enable public access from their institution's repository after an embargo period. This is the version that has been accepted for publication and which typically includes author-incorporated changes suggested during submission, peer review and in editor-author communications. Embargo period: For subscription articles, an appropriate amount of time is needed for journals to deliver value to subscribing customers before an article becomes freely available to the public. This is the embargo period and it begins from the date the article is formally published online in its final and fully citable form. [Find out more.](https://www.elsevier.com/openaccess)

This journal has an embargo period of 12 months.

**Elsevier Researcher Academy**
Researcher Academy is a free e-learning platform designed to support early and mid-career researchers throughout their research journey. The "Learn" environment at Researcher Academy offers several interactive modules, webinars, downloadable guides and resources to guide you through the process of writing for research and going through peer review. Feel free to use these free resources to improve your submission and navigate the publication process with ease.

**Language (usage and editing services)**
Please write your text in good English (American or British usage is accepted, but not a mixture of these). Authors who feel their English language manuscript may require editing to eliminate possible grammatical or spelling errors and to conform to correct scientific English may wish to use the English Language Editing service available from Elsevier's Author Services.

**Submission**
Our online submission system guides you stepwise through the process of entering your article details and uploading your files. The system converts your article files to a single PDF file used in the peer-review process. Editable files (e.g., Word, LaTeX) are required to typeset your article for final publication. All correspondence, including notification of the Editor’s decision and requests for revision, is sent by e-mail.

**Manuscript Submission**
The *Journal of Affective Disorders* now proceeds totally online via an electronic submission system. Mail submissions will no longer be accepted. By accessing the online submission system, [https://www.evise.com/profile/api/navigate/JAD](https://www.evise.com/profile/api/navigate/JAD), you will be guided stepwise through the creation and uploading of the various files. When submitting a manuscript online, authors need to provide an electronic version of their manuscript and any accompanying figures and tables.

The author should select from a list of scientific classifications, which will be used to help the editors select reviewers with appropriate expertise, and an article type for their manuscript. Once the uploading is done, the system automatically generates an electronic (PDF) proof, which is then used for reviewing. All correspondence, including the Editor's decision and request for revisions, will be processed through the system and will reach the corresponding author by e-mail.

Once a manuscript has successfully been submitted via the online submission system authors may track the status of their manuscript using the online submission system (details will be provided by e-mail). If your manuscript is accepted by the journal, subsequent tracking facilities are available on Elsevier's Author Gateway, using the unique reference number provided by Elsevier and corresponding author name (details will be provided by e-mail).
Authors may send queries concerning the submission process or journal procedures to our Editors-in-Chief

**Paolo Brambilla:** paolo.brambilla1@unimi.it or **Jair Soares:** Jair.C.Soares@uth.tmc.edu.

Please submit your article via [https://www.evise.com/profile/api/navigate/JAD](https://www.evise.com/profile/api/navigate/JAD).

**Types of Papers**
The Journal primarily publishes:

- **Full-Length Research Papers** (up to 5000 words, excluding references and up to 6 tables/figures)
- **Review Articles and Meta-analyses** (up to 8000 words, excluding references and up to 10 tables/figures)
- **Short Communications** (up to 2000 words, 20 references, 2 tables/figures)
- **Correspondence** (up to 1000 words, 10 references, 1 table/figure).

At the discretion of the accepting Editor-in-Chief, and/or based on reviewer feedback, authors may be allowed fewer or more than these guidelines.

**Retraction Policy**
It is a general principle of scholarly communication that the editor of a learned journal is solely and independently responsible for deciding which articles submitted to the journal shall be published. In making this decision the editor is guided by policies of the journal's editorial board and constrained by such legal requirements in force regarding libel, copyright infringement and plagiarism. Although electronic methods are available to detect plagiarism and duplicate publications, editors nonetheless rely in large part on the integrity of authors to fulfil their responsibilities within the requirements of publication ethics and only submit work to which the can rightfully claim authorship and which has not previously been published.

An outcome of this principle is the importance of the scholarly archive as a permanent, historic record of the transactions of scholarship. Articles that have been published shall remain extant, exact and unaltered as far as is possible. However, very occasionally circumstances may arise where an article is published that must later be retracted or even removed. Such actions must not be undertaken lightly and can only occur under exceptional circumstances, such as:

- **Article Withdrawal:** Only used for Articles in Press which represent early versions of articles and sometimes contain errors, or may have been accidentally submitted twice. Occasionally, but less frequently, the articles may represent infringements of professional ethical codes, such as multiple submission, bogus claims of authorship, plagiarism, fraudulent use of data or the like.
- **Article Retraction:** Infringements of professional ethical codes, such as multiple submission, bogus claims of authorship, plagiarism, fraudulent use of data or the like. Occasionally a retraction will be used to correct errors in submission or publication.
- **Article Removal:** Legal limitations upon the publisher, copyright holder or author(s).
- **Article Replacement:** Identification of false or inaccurate data that, if acted upon, would pose a serious health risk. For the full policy and further details, please refer [https://www.elsevier.com/about/publishing-guidelines/policies/article-withdrawal](https://www.elsevier.com/about/publishing-guidelines/policies/article-withdrawal)

**Referees**
Please submit the names and institutional e-mail addresses of several potential referees. For more details, visit our [Support site](https://www.elsevier.com/). Note that the editor retains the sole right to decide whether or not the suggested reviewers are used.

**Preparation of Manuscripts**
Articles should be in English. The title page should appear as a separate sheet bearing title (without article type), author names and affiliations, and a footnote with the corresponding author's full contact information, including address, telephone and fax numbers, and e-mail address (failure to include an e-mail address can delay processing of the manuscript).

Papers should be divided into sections headed by a caption (e.g., Introduction, Methods, Results, Discussion). A structured abstract of no more than 250 words should appear on a separate page with the following headings and order: Background, Methods, Results, Limitations, Conclusions (which
should contain a statement about the clinical relevance of the research). A list of three to six key words should appear under the abstract. Authors should note that the 'limitations' section both in the discussion of the paper AND IN A STRUCTURED ABSTRACT are essential. Failure to include it may delay in processing the paper, decision making and final publication.

Figures and Photographs

Figures and Photographs of good quality should be submitted online as a separate file. Please use a lettering that remains clearly readable even after reduction to about 66%. For every figure or photograph, a legend should be provided. All authors wishing to use illustrations already published must first obtain the permission of the author and publisher and/or copyright holders and give precise reference to the original work. This permission must include the right to publish in electronic media.

Tables

Tables should be numbered consecutively with Arabic numerals and must be cited in the text in sequence. Each table, with an appropriate brief legend, comprehensible without reference to the text, should be typed on a separate page and uploaded online. Tables should be kept as simple as possible and wherever possible a graphical representation used instead. Table titles should be complete but brief. Information other than that defining the data should be presented as footnotes.

Please refer to the generic Elsevier artwork instructions: http://authors.elsevier.com/artwork/jad.

Preparation of supplementary data

Elsevier accepts electronic supplementary material to support and enhance your scientific research. Supplementary files offer the author additional possibilities to publish supporting applications, movies, animation sequences, high-resolution images, background datasets, sound clips and more.

Supplementary files supplied will be published online alongside the electronic version of your article in Elsevier web products, including ScienceDirect: http://www.sciencedirect.com. In order to ensure that your submitted material is directly usable, please ensure that data is provided in one of our recommended file formats. Authors should submit the material in electronic format together with the article and supply a concise and descriptive caption for each file. For more detailed instructions please visit our Author Gateway at: https://www.elsevier.com/authors.

Colour reproduction

The Journal of Affective Disorders is now also included in a new initiative from Elsevier: 'Colourful e-Products'. Through this initiative, figures that appear in black & white in print can appear in colour, online, in ScienceDirect at http://www.sciencedirect.com.

There is no extra charge for authors who participate.

For colour reproduction in print, you will receive information regarding the costs from Elsevier after receipt of your accepted article. Please indicate your preference for colour in print or on the Web only. Because of technical complications which can arise by converting colour figures to "grey scale" (for the printed version should you not opt for colour in print) please submit in addition usable black and white versions of all the colour illustrations. For further information on the preparation of electronic artwork, please see http://authors.elsevier.com/artwork/jad.

Peer review

This journal operates a single blind review process. All contributions will be initially assessed by the editor for suitability for the journal. Papers deemed suitable are then typically sent to a minimum of two independent expert reviewers to assess the scientific quality of the paper. The Editor is responsible for the final decision regarding acceptance or rejection of articles. The Editor's decision is final. More information on types of peer review.

Use of word processing software

It is important that the file be saved in the native format of the word processor used. The text should be in single-column format. Keep the layout of the text as simple as possible. Most formatting codes will be removed and replaced on processing the article. In particular, do not use the word
processor’s options to justify text or to hyphenate words. However, do use bold face, italics, subscripts, superscripts etc. When preparing tables, if you are using a table grid, use only one grid for each individual table and not a grid for each row. If no grid is used, use tabs, not spaces, to align columns. The electronic text should be prepared in a way very similar to that of conventional manuscripts (see also the Guide to Publishing with Elsevier). Note that source files of figures, tables and text graphics will be required whether or not you embed your figures in the text. See also the section on Electronic artwork.

To avoid unnecessary errors you are strongly advised to use the 'spell-check' and 'grammar-check' functions of your word processor.

**Highlights**

Highlights are mandatory for this journal as they help increase the discoverability of your article via search engines. They consist of a short collection of bullet points that capture the novel results of your research as well as new methods that were used during the study (if any). Please have a look at the examples here: example Highlights.

Highlights should be submitted in a separate editable file in the online submission system. Please use 'Highlights' in the file name and include 3 to 5 bullet points (maximum 85 characters, including spaces, per bullet point).

**Abstract**

A concise and factual abstract is required. The abstract should state briefly the purpose of the research, the principal results and major conclusions. An abstract is often presented separately from the article, so it must be able to stand alone. For this reason, References should be avoided, but if essential, then cite the author(s) and year(s). Also, non-standard or uncommon abbreviations should be avoided, but if essential they must be defined at their first mention in the abstract itself.

**Graphical abstract**

Although a graphical abstract is optional, its use is encouraged as it draws more attention to the online article. The graphical abstract should summarize the contents of the article in a concise, pictorial form designed to capture the attention of a wide readership. Graphical abstracts should be submitted as a separate file in the online submission system. Image size: Please provide an image with a minimum of 531 × 1328 pixels (h × w) or proportionally more. The image should be readable at a size of 5 × 13 cm using a regular screen resolution of 96 dpi. Preferred file types: TIFF, EPS, PDF or MS Office files. You can view Example Graphical Abstracts on our information site.

Authors can make use of Elsevier’s Illustration Services to ensure the best presentation of their images and in accordance with all technical requirements.

**Keywords**

Immediately after the abstract, provide a maximum of 6 keywords, using American spelling and avoiding general and plural terms and multiple concepts (avoid, for example, 'and', 'of'). Be sparing with abbreviations: only abbreviations firmly established in the field may be eligible. These keywords will be used for indexing purposes.

**Abbreviations**

Define abbreviations that are not standard in this field in a footnote to be placed on the first page of the article. Such abbreviations that are unavoidable in the abstract must be defined at their first mention there, as well as in the footnote. Ensure consistency of abbreviations throughout the article.

**Acknowledgements**

Collate acknowledgements in a separate section at the end of the article before the references and do not, therefore, include them on the title page, as a footnote to the title or otherwise. List here those individuals who provided help during the research (e.g., providing language help, writing assistance or proof reading the article, etc.).

**Formatting of funding sources**

List funding sources in this standard way to facilitate compliance to funder’s requirements:

Funding: This work was supported by the National Institutes of Health [grant numbers xxxx, yyyy]; the Bill & Melinda Gates Foundation, Seattle, WA [grant number zzzz]; and the United States Institutes of Peace [grant number aaaa].
It is not necessary to include detailed descriptions on the program or type of grants and awards. When funding is from a block grant or other resources available to a university, college, or other research institution, submit the name of the institute or organization that provided the funding.

If no funding has been provided for the research, please include the following sentence:

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

*Nomenclature and units*

Follow internationally accepted rules and conventions: use the international system of units (SI). If other quantities are mentioned, give their equivalent in SI. You are urged to consult *IUPAC: Nomenclature of Organic Chemistry* for further information.

*Math formulae*

Please submit math equations as editable text and not as images. Present simple formulae in line with normal text where possible and use the solidus (/) instead of a horizontal line for small fractional terms, e.g., X/Y. In principle, variables are to be presented in italics. Powers of e are often more conveniently denoted by exp. Number consecutively any equations that have to be displayed separately from the text (if referred to explicitly in the text).

*Footnotes*

Footnotes should be used sparingly. Number them consecutively throughout the article. Many word processors can build footnotes into the text, and this feature may be used. Otherwise, please indicate the position of footnotes in the text and list the footnotes themselves separately at the end of the article. Do not include footnotes in the Reference list.

*Artwork*

**Electronic artwork**

*General points*

- Make sure you use uniform lettering and sizing of your original artwork.
- Embed the used fonts if the application provides that option.
- Aim to use the following fonts in your illustrations: Arial, Courier, Times New Roman, Symbol, or use fonts that look similar.
- Number the illustrations according to their sequence in the text.
- Use a logical naming convention for your artwork files.
- Provide captions to illustrations separately.
- Size the illustrations close to the desired dimensions of the published version.
- Submit each illustration as a separate file.

A detailed guide on electronic artwork is available.

**You are urged to visit this site; some excerpts from the detailed information are given here.**

*Formats*

If your electronic artwork is created in a Microsoft Office application (Word, PowerPoint, Excel) then please supply 'as is' in the native document format.

Regardless of the application used other than Microsoft Office, when your electronic artwork is finalized, please 'Save as' or convert the images to one of the following formats (note the resolution requirements for line drawings, halftones, and line/halftone combinations given below):

- **EPS (or PDF):** Vector drawings, embed all used fonts.
- **TIFF (or JPEG):** Color or grayscale photographs (halftones), keep to a minimum of 300 dpi.
- **TIFF (or JPEG):** Bitmapped (pure black & white pixels) line drawings, keep to a minimum of 1000 dpi.
- **TIFF (or JPEG):** Combinations bitmapped line/halftone (color or grayscale), keep to a minimum of 500 dpi.

**Please do not:**

- Supply files that are optimized for screen use (e.g., GIF, BMP, PICT, WPG); these typically have a low number of pixels and limited set of colors;
- Supply files that are too low in resolution;
- Submit graphics that are disproportionately large for the content.

*Color artwork*

Please make sure that artwork files are in an acceptable format (TIFF (or JPEG), EPS (or PDF), or MS Office files) and with the correct resolution. If, together with your accepted article, you submit usable color figures then Elsevier will ensure, at no additional charge, that these figures will appear in color online (e.g., ScienceDirect and other sites) regardless of whether or not these illustrations
are reproduced in color in the printed version. **For color reproduction in print, you will receive information regarding the costs from Elsevier after receipt of your accepted article.** Please indicate your preference for color: in print or online only. **Further information on the preparation of electronic artwork.**

**Illustration services**

Elsevier's Author Services offers Illustration Services to authors preparing to submit a manuscript but concerned about the quality of the images accompanying their article. Elsevier's expert illustrators can produce scientific, technical and medical-style images, as well as a full range of charts, tables and graphs. Image 'polishing' is also available, where our illustrators take your image(s) and improve them to a professional standard. Please visit the website to find out more.

**Tables**

Please submit tables as editable text and not as images. Tables can be placed either next to the relevant text in the article, or on separate page(s) at the end. Number tables consecutively in accordance with their appearance in the text and place any table notes below the table body. Be sparing in the use of tables and ensure that the data presented in them do not duplicate results described elsewhere in the article. Please avoid using vertical rules and shading in table cells.

**References**

**Citation in text**

Please ensure that every reference cited in the text is also present in the reference list (and vice versa). Any references cited in the abstract must be given in full. Unpublished results and personal communications are not recommended in the reference list, but may be mentioned in the text. If these references are included in the reference list they should follow the standard reference style of the journal and should include a substitution of the publication date with either 'Unpublished results' or 'Personal communication'. Citation of a reference as 'in press' implies that the item has been accepted for publication.

**Data references**

This journal encourages you to cite underlying or relevant datasets in your manuscript by citing them in your text and including a data reference in your Reference List. Data references should include the following elements: author name(s), dataset title, data repository, version (where available), year, and global persistent identifier. Add [dataset] immediately before the reference so we can properly identify it as a data reference. The [dataset] identifier will not appear in your published article.

**Reference management software**

Most Elsevier journals have their reference template available in many of the most popular reference management software products. These include all products that support Citation Style Language styles, such as Mendeley. Using citation plug-ins from these products, authors only need to select the appropriate journal template when preparing their article, after which citations and bibliographies will be automatically formatted in the journal's style. If no template is yet available for this journal, please follow the format of the sample references and citations as shown in this Guide. If you use reference management software, please ensure that you remove all field codes before submitting the electronic manuscript. More information on how to remove field codes from different reference management software.

Users of Mendeley Desktop can easily install the reference style for this journal by clicking the following link:


When preparing your manuscript, you will then be able to select this style using the Mendeley plug-ins for Microsoft Word or LibreOffice.

**Reference style**

**Text:** All citations in the text should refer to:

1. **Single author:** the author's name (without initials, unless there is ambiguity) and the year of publication;
2. **Two authors:** both authors' names and the year of publication;
3. **Three or more authors:** first author's name followed by 'et al.' and the year of publication.

Citations may be made directly (or parenthetically). Groups of references can be listed either first alphabetically, then chronologically, or vice versa.

Examples: 'as demonstrated (Allan, 2000a, 2000b, 1999; Allan and Jones, 1999).... Or, as demonstrated (Jones, 1999; Allan, 2000)... Kramer et al. (2010) have recently shown ...'
List: References should be arranged first alphabetically and then further sorted chronologically if necessary. More than one reference from the same author(s) in the same year must be identified by the letters 'a', 'b', 'c', etc., placed after the year of publication.

Examples:
Reference to a journal publication:
Reference to a journal publication with an article number:
Reference to a book:
Reference to a chapter in an edited book:
Reference to a website:
Reference to a dataset:

Video
Elsevier accepts video material and animation sequences to support and enhance your scientific research. Authors who have video or animation files that they wish to submit with their article are strongly encouraged to include links to these within the body of the article. This can be done in the same way as a figure or table by referring to the video or animation content and noting in the body text where it should be placed. All submitted files should be properly labeled so that they directly relate to the video file's content. In order to ensure that your video or animation material is directly usable, please provide the file in one of our recommended file formats with a preferred maximum size of 150 MB per file, 1 GB in total. Video and animation files supplied will be published online in the electronic version of your article in Elsevier Web products, including ScienceDirect. Please supply 'stills' with your files: you can choose any frame from the video or animation or make a separate image. These will be used instead of standard icons and will personalize the link to your video data. For more detailed instructions please visit our video instruction pages. Note: since video and animation cannot be embedded in the print version of the journal, please provide text for both the electronic and the print version for the portions of the article that refer to this content.

Data visualization
Include interactive data visualizations in your publication and let your readers interact and engage more closely with your research. Follow the instructions here to find out about available data visualization options and how to include them with your article.

Supplementary material
Supplementary material such as applications, images and sound clips, can be published with your article to enhance it. Submitted supplementary items are published exactly as they are received (Excel or PowerPoint files will appear as such online). Please submit your material together with the article and supply a concise, descriptive caption for each supplementary file. If you wish to make changes to supplementary material during any stage of the process, please make sure to provide an updated file. Do not annotate any corrections on a previous version. Please switch off the 'Track Changes' option in Microsoft Office files as these will appear in the published version.

Research data
This journal encourages and enables you to share data that supports your research publication where appropriate, and enables you to interlink the data with your published articles. Research data refers to the results of observations or experimentation that validate research findings. To facilitate reproducibility and data reuse, this journal also encourages you to share your software, code, models, algorithms, protocols, methods and other useful materials related to the project.
Below are a number of ways in which you can associate data with your article or make a statement about the availability of your data when submitting your manuscript. If you are sharing data in one of these ways, you are encouraged to cite the data in your manuscript and reference list. Please refer to the "References" section for more information about data citation. For more information on depositing, sharing and using research data and other relevant research materials, visit the research data page.

**Data linking**

If you have made your research data available in a data repository, you can link your article directly to the dataset. Elsevier collaborates with a number of repositories to link articles on ScienceDirect with relevant repositories, giving readers access to underlying data that gives them a better understanding of the research described.

There are different ways to link your datasets to your article. When available, you can directly link your dataset to your article by providing the relevant information in the submission system. For more information, visit the database linking page.

For supported data repositories a repository banner will automatically appear next to your published article on ScienceDirect.

In addition, you can link to relevant data or entities through identifiers within the text of your manuscript, using the following format: Database: xxxx (e.g., TAIR: AT1G01020; CCDC: 734053; PDB: 1XFN).

**Mendeley Data**

This journal supports Mendeley Data, enabling you to deposit any research data (including raw and processed data, video, code, software, algorithms, protocols, and methods) associated with your manuscript in a free-to-use, open access repository. During the submission process, after uploading your manuscript, you will have the opportunity to upload your relevant datasets directly to Mendeley Data. The datasets will be listed and directly accessible to readers next to your published article online.

For more information, visit the Mendeley Data for journals page.

**Data statement**

To foster transparency, we encourage you to state the availability of your data in your submission. This may be a requirement of your funding body or institution. If your data is unavailable to access or unsuitable to post, you will have the opportunity to indicate why during the submission process, for example by stating that the research data is confidential. The statement will appear with your published article on ScienceDirect. For more information, visit the Data Statement page.

**AFTER ACCEPTANCE**

**Author disclosure**

Funding body agreements and policies Elsevier has established agreements and developed policies to allow authors whose articles appear in journals published by Elsevier, to comply with potential manuscript archiving requirements as specified as conditions of their grant awards. To learn more about existing agreements and policies please visit [https://www.elsevier.com/fundingbodies](https://www.elsevier.com/fundingbodies)

The second aspect of the Journal's new policy concerns the Conflict of Interest. ALL authors are requested to disclose any actual or potential conflict of interest including any financial, personal or other relationships with other people or organizations within three (3) years of beginning the work submitted that could inappropriately influence, or be perceived to influence, their work.

Examples of potential conflicts of interest which should be disclosed include employment, consultancies, stock ownership (except for personal investment purposes equal to the lesser of one percent (1%) or USD 5000), honoraria, paid expert testimony, patent applications, registrations, and grants. If there are no conflicts of interest, authors should state that there are none.

eg, Author Y owns shares in pharma company A. Author X and Z have consulted for pharma company B. All other authors declare that they have no conflicts of interest.

Finally, before the references, the Journal will publish Acknowledgements, in a separate section, and not as a footnote on the title page.
eg, We thank Mr A, who kindly provided the data necessary for our analysis, and Miss B, who assisted with the preparation and proof-reading of the manuscript.

The submitting author is also required to make a brief statement concerning each named author's contributions to the paper under the heading Contributors. This statement is for editorial purposes only and will not be published with the article.

eg, Author X designed the study and wrote the protocol. Author Y managed the literature searches and analyses. Authors X and Z undertook the statistical analysis, and author W wrote the first draft of the manuscript. All authors contributed to and have approved the final manuscript.

NB. During the online submission process the author will be prompted to upload these four mandatory author disclosures as separate items. They will be automatically incorporated in the PDF builder of the online submission system. Please do not include in the main manuscripts.

Copyright Transfer
Upon acceptance of an article, you will be asked to transfer copyright (for more information on copyright see http://www.elsevier.com/copyright). This transfer will ensure the widest possible dissemination of information. If excerpts from other copyrighted works are included in the submission, the author(s) must obtain written permission from the copyright owners and credit the source(s) in the article. Elsevier has preprinted forms for use by authors in these cases: contact Elsevier's Rights Department, Philadelphia, PA, USA: phone (+1) 215 238 7869, fax (+1) 215 238 2239, e-mail: healthpermissions@elsevier.com.

Requests for materials from other Elsevier publications may also be completed on-line via the Elsevier homepage https://www.elsevier.com/permissions

Online proof correction
Corresponding authors will receive an e-mail with a link to our online proofing system, allowing annotation and correction of proofs online. The environment is similar to MS Word: in addition to editing text, you can also comment on figures/tables and answer questions from the Copy Editor. Web-based proofing provides a faster and less error-prone process by allowing you to directly type your corrections, eliminating the potential introduction of errors.

If preferred, you can still choose to annotate and upload your edits on the PDF version. All instructions for proofing will be given in the e-mail we send to authors, including alternative methods to the online version and PDF.

We will do everything possible to get your article published quickly and accurately. Please use this proof only for checking the typesetting, editing, completeness and correctness of the text, tables and figures. Significant changes to the article as accepted for publication will only be considered at this stage with permission from the Editor. It is important to ensure that all corrections are sent back to us in one communication. Please check carefully before replying, as inclusion of any subsequent corrections cannot be guaranteed. Proofreading is solely your responsibility.

Reprints
The corresponding author, at no cost, will be provided with a PDF file of the article via e-mail. The PDF file is a watermarked version of the published article and includes a cover sheet with the journal cover image and a disclaimer outlining the terms and conditions of use. There are no page charges.

Author enquiries: For enquiries relating to the submission of articles please visit Elsevier’s Author Gateway at http://authors.elsevier.com/journal/jad. The Author Gateway also provides the facility to track accepted articles and set up e-mail alerts to inform you of when an article's status has changed, as well as detailed artwork guidelines, copyright information, frequently asked questions and more. Contact details for questions arising after acceptance of an article, especially those relating to proofs, are provided after registration of an article for publication.

Offprints
The corresponding author will, at no cost, receive a customized Share Link providing 50 days free access to the final published version of the article on ScienceDirect. The Share Link can be used for sharing the article via any communication channel, including email and social media. For an extra charge, paper offprints can be ordered via the offprint order form which is sent once the article is accepted for publication. Both corresponding and co-authors may order offprints at any time via
Elsevier's Author Services. Corresponding authors who have published their article gold open access do not receive a Share Link as their final published version of the article is available open access on ScienceDirect and can be shared through the article DOI link.

**AUTHOR INQUIRIES**

Visit the Elsevier Support Center to find the answers you need. Here you will find everything from Frequently Asked Questions to ways to get in touch. You can also check the status of your submitted article or find out when your accepted article will be published.